APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/473,098	12/28/1999	JULIO ESTRADA	L09-99-047	9594

EXAMINER
SHIN, KYUNG H

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/473,098	ESTRADA, JULIO
	Examiner	Art Unit	
	Kyung H. Shin	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 October 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-10,13 and 15</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-10,13,15</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responding to application RCE filed 10/21/2005.

2.   Claims **1 - 15** are pending. Claims **1, 3, 8, 9, 10, 13, 15** are amended. Claims **11,

12, 14** have been cancelled. Independent claims are **1, 3, 8, 9, 10, 13, 15**.

Response to Arguments

3.   Applicant's arguments have been fully considered but they are not persuasive.

3.1   Applicant argues that the referenced prior art does not disclose *" ...

membership in an access control list control on a specific subroom in

collaborative space is limited to members included in the access control list

for the collaborative space ... " (see Remarks Page 20, Lines 27-30)*

The Salas (6,233,600) prior art discloses the capability for a

collaborative workspace. (see Salas col. 5, lines 8-11; col. 12, lines 7-22; col.

3, lines 49-51; col. 6, lines 52-58: access control, collaborative workspace)

The Salas (6,233,600) and Maurille (6,484,196) prior art combination

discloses a hierarchical (i.e. tree, parent-child) data structure utilizing forward

and backward pointers. (see Maurille col. 16, lines 17-22; col. 8, lines 33-38:

pointers) The Salas (6,233,600) and Cutler (5,129,083) prior art combination

discloses (see Cutler col. 2, lines 27-30; col. 22, lines 65-67; col. 5, lines 21-

25: access control list, doubly linked lists)

The scope of applicant's invention is as a system and in independent

claims 13 and 15 as a software program, which is generated at the conclusion of a software development effort. The concept of an Access Control List (ACL) is a standard security concept within software development and is well known to one skilled in the art. It designates the access rights a particular user has concerning a particular object (see references below). This particular object can be any object, such as a virtual room within a collaborative workspace. The access control list contains fields which designates different combinations of access rights to an object for a particular user. Also, the concept of a linked list (i.e. a doubly linked list) is well known to one skilled in the art. A linked list is an object, which incorporates a pointer designating another object (i.e. a room). Doubly linked lists designates an object in a forward and backward direction. The combined disclosures of Salas (6,233,600), Maurille (6,484,196), and Cutler (5,129,083) and its feature (i.e. limitations) combinations disclose the applicant's invention. Security and data structures are standard concepts implemented within any software development effort, and these issues would be addressed and resolved in any software development effort including the software for the applicant's invention.

After an extensive search and analysis of the existing prior art (Salas: 6,233,600, Maurille: 6,484,196, and Cutler: 5,129,083), the examiner's initial selection of the above stated prior art stands, and the above stated prior art discloses all claims and limitations of applicant's invention. The referenced

prior art discloses the applicant's invention and all its limitations.

References:

(http://www.answers.com/topic/access-control-list)

(http://searchsecurity.techtarget.com/sDefinition/0,,sid14_gci213757,00.html)

(http://searchsecurity.techtarget.com/sDefinition/0,,sid14_gci213757,00.html

3.2   In reply to an obviousness rejection under 35 U.S.C. § 103, applicant argues
that a secondary reference and a primary reference combination is not
allowed due to nonobviousness.

The test for obviousness is not whether the features of a secondary reference
may be bodily incorporated into the structure of the primary reference; nor is it
that the claimed invention must be expressly suggested in any one or all of
the references. Rather, the test is what the combined teachings of the
references would have suggested to those of ordinary skill in the art. See *In
re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Furthermore, in response to applicant's arguments against the reference
individually, one cannot show nonobviousness by attacking references
individually where rejections are based on combinations of references. See
In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*,
800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

3.3   Applicant argues that the examiner's conclusion of obviousness is based
upon improper hindsight reasoning. It must be recognized that any judgment
on obviousness is in a sense necessarily a reconstruction based upon

hindsight reasoning. But so long as it takes into account only knowledge

which was within the level of ordinary skill at the time the claimed invention

was made, and does not include knowledge gleaned only from the applicant's

disclosure, such a reconstruction is proper. See In re McLaughlin, 443 F.2d

1392, 170 USPQ 209 (CCPA 1971).

Claim Rejection - 35 USC § 103

4.   **Claims 1-10,13 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable

over **Salas** (US Patent No. 6,233,600) in view of **Maurille** (US Patent No. 6,484,196)

and further in view of **Cutler et al.** (US Patent No. 5,129,083).

Regarding Claim 1, Salas discloses a collaboration space including a plurality of rooms

in a hierarchical structure with access control list control on rooms and access control

list control on forward pointers to child rooms (see Salas col. 3, lines 49-51: plurality of

rooms with hierarchical pointers and access mechanism), comprising:

c)   the readers field being a members object for identifying members authorized to

access the room and for each member a level of authorization. (see Salas col.

13, lines 32-34; col. 14, lines 37-39: object access control (readers field)

mechanism)

a)   Salas discloses a database and an access control list for users authorized to

access the room and a notes, each subroom being an independent entity

belonging to the place, the place having a first data note including a directory of

members of the place. (see Salas col. 3, lines 49-51; col. 13, lines 32-34) Salas

does not specifically disclose a database system for management of

collaborative space. However, Maurille discloses a place comprising a plurality

of subrooms, (see Maurille col. 6, lines 44-57: database system for member,

message information) each subroom within the place having a data note

associated therewith containing an access control list of members selected

exclusively from the directory of members by a member of the place having

manager or author authority with respect to the subroom for specifying users of

the place authorized to access the subroom, and Cutler specifically discloses the

usage of object oriented technology utilizing access control list techniques for

collaborative space management (see Cutler col. 2, lines 27-30; col. 22, lines 65-

67; col. 5, lines 21-25: objects provide access control lists controlling access to

objects, object inheritance- child has equal or less access capabilities of

parent).

b) Salas discloses a readers field for providing access control list type control on the

forward pointer and a child room and subroom, each subroom being an

independent entity belonging to the place, the place having a first data note

including a directory of members of the place. (see Salas col. 13, lines 32-34;

col. 14, lines 37-39) Salas does not specifically disclose a database system for

collaborative workspace. However, Maurille discloses forward and reverse

pointers for linking the subrooms (see Maurille col. 16, lines 17-22; col. 8, lines

33-38: to/from (forward/reverse) pointers), each the forward pointer including

indicia specifying the address location of the entity forming the child room (see

Maurille col. 6, lines 44-57: database system for member, message

information).

d) Salas discloses a document readers field for a document containing data in the

subroom being a members object for identifying a subset of members of the

place authorized to access a subroom who are also authorized to access the

document.   (see Salas col. 13, lines 32-34: readers field), and Cutler specifically

discloses the utilization of object oriented techniques such as access control list

techniques for collaborative space management (see Cutler col. 2, lines 27-30;

col. 22, lines 65-67; col. 5, lines 21-25: objects provide access control lists

controlling access to objects, object inheritance- child has equal or less access

capabilities of parent).

e) Salas discloses wherein the collaboration space comprising a hierarchy of rooms,

each room being a place in collaboration space including the directory of

members; and Cutler discloses wherein the directory of members, the access

control list of members, and the readers field selectively providing increased,

decreased, and maintained access to a child place in collaboration space, with

access at any level of authority to a child place enabled only for those authorized

to access a corresponding parent place, and Maurille discloses wherein whether

a link to a child place will be enabled for a specific user in its corresponding

parent place. (see Salas col. 5, lines 8-11; col. 12, lines 7-22: collaborative

workspace virtual rooms) and (see Maurille col. 16, lines 17-22; col. 8, lines 33-

38: pointers, hierarchical structure) and (see Cutler col. 2, lines 27-30; col. 22,

lines 65-67; col. 5, lines 21-25: access control lists, doubly linked lists)

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Salas to operate a collaborative workspace for message

communications between members as taught by Maurille, and to modify Salas to enable

utilization of standard object oriented techniques for collaborative space processing

such as pointers to objects containing access control lists (ACLs) and controlling access

to objects as taught by Cutler. One of ordinary skill in the art would be motivated to

employ Maurille in order to optimize message processing and display capabilities for a

networked collaborative communications environment.   (see Maurille col. 6, lines 13-

16: " ... *Message mode allows a user to interact with a private bulletin board in which his*

messages (i.e., any message involving the user as sender or recipient) are instantly

available and displayed with full threading information ... "), and to employ Cutler in

order to efficiently enhance security by providing limited visibility of computer resources

and protecting data integrity. (see Cutler col. 1, lines 47-53: " ... *access control should*

also provide limited "visibility" of computer resources ... unauthorized user cannot obtain

information about another user ... protect data integrity ... protect against simultaneous

accesses by different authorized processes ... ")

Regarding Claim 2, Salas discloses the collaboration space of claim 1, the levels of

authorization including manager, author, and reader. (see Salas col. 13, lines 27-37;

col. 14, lines 44-54: authorization levels (manager, reader, coordinator) are managed to

allow create, modify, edit procedures)

Regarding Claim 3, Salas discloses a collaboration space, comprising:

b) a member directory for the place identifying users authorized to enter the place;

(see Salas col. 3, lines 49-51: member information and access controls)

c) each the room comprising one or more pages, and for each the room a members

object for identifying a subset of members of the place authorized to access the

room and for each member a level of authorization, each member of the subset

of members being a user authorized in the member directory to enter the place;

(see Salas col. 3, lines 49-51; col. 14, lines 39-44: member information and

access levels)

a) Salas discloses a plurality of rooms with pointers in a hierarchical structure for a

collaborative workspace. (see Salas col. 3, lines 49-51) Salas does not

specifically mention forward and backward pointers. However, Maurille discloses

objects (rooms) linked by forward and backward pointers. (see Maurille col. 16,

lines 17-22; col. 8, lines 33-38; pointers with to/from (forward/backward) pointers

for parent/child navigation)

d) Salas discloses a readers field for providing access control list control on the

forward pointer, the readers field for identifying those members of the subset of

members of the place authorized to access a parent room that are also

authorized to access a child room and a database for the rooms including a

parent room and a child room structure for collaborative workspace. (see Salas
col. 3, lines 49-51; col. 13, lines 32-34) Salas does not disclose forward and
backward pointers. However, Maurille discloses the pointers comprising forward
and backward pointers for enabling the security of each the room to be
independently managed, the forward pointers including indicia identifying the
child room, indicia specifying the address location of the database forming the
child room (see Maurille col. 6, lines 44-57: database system for member,
message information), and Cutler specifically discloses the utilization of object
oriented techniques such as access control list techniques for collaborative
space management (see Cutler col. 2, lines 27-30; col. 22, lines 65-67; col. 5,
lines 21-25: objects provide access control lists controlling access to objects,
object inheritance- child has equal or less access capabilities of parent).

e) Salas discloses wherein the collaboration space comprising a hierarchy of rooms,
each room being a place in collaboration space including the directory of
members; and Cutler discloses wherein the directory of members, the access
control list of members, and the readers field selectively providing increased,
decreased, and maintained access to a child place in collaboration space, with
access at any level of authority to a child place enabled only for those authorized
to access a corresponding parent place, and Maurille discloses wherein whether
a link to a child place will be enabled for a specific user in its corresponding
parent place. (see Salas col. 5, lines 8-11; col. 12, lines 7-22: collaborative
workspace virtual rooms) and (see Maurille col. 16, lines 17-22; col. 8, lines 33-

38: pointers, hierarchical structure) and (see Cutler col. 2, lines 27-30; col. 22,

lines 65-67; col. 5, lines 21-25: access control lists, doubly linked lists)

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Salas to operate a collaborative workspace for message

communications between members as taught by Maurille, and to modify Salas to enable

utilizing standard object oriented techniques such as access control lists (ACLs)

controlling access to objects for collaborative space management as taught by Cutler.

One of ordinary skill in the art would be motivated to employ Maurille in order to

optimize message processing and display capabilities for a networked collaborative

communications environment (see Maurille col. 6, lines 13-16), and to employ Cutler in

order to efficiently enhance security by providing limited visibility of computer resources

and protecting data integrity (see Cutler col. 1, lines 47-53).

Regarding Claim 4, Salas discloses the collaboration space of claim 3, the readers

field including an access authority for each reader authorized to enter the room

selectively as manager, author or manager. (see Salas col. 7, lines 8-10 col. 14, lines

39-54: readers field access control information for room with different access levels)

Regarding Claim 5, Salas discloses the collaboration space of claim 3, each the

forward pointer being a secure pointer by carrying the same level of security as the child

room to which it points. (see Salas col. 8, lines 12-16; col. 6, lines 52-56; col. 7, lines 8-

10: room template controls room generation, parent-child relationship, child inherits

characteristics of parent (including access capabilities)) Salas does not specifically

disclose the access control level for a child room is the same or less than the access

control level of a parent room. However, Cutler discloses the same level of security as

the child room to which it points. (see Cutler col. 2, lines 27-30; col. 22, lines 65-67; col.

5, lines 21-25: objects provide access control lists controlling access to objects, object

inheritance- child has equal or less access capabilities of parent)

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Salas to enable utilizing standard object oriented

techniques such as access control lists (ACLs) controlling access to objects for

collaborative space management as taught by Cutler. One of ordinary skill in the art

would be motivated to employ Cutler in order to efficiently enhance security by providing

limited visibility of computer resources and protecting data integrity. (see Cutler col. 1,

lines 47-53)

Regarding Claim 6, Salas discloses the collaboration space of claim 5, each the

forward pointer carrying in the readers field the same security as that of the subroom to

which it points. (see Salas col. 8, lines 12-16; col. 6, lines 52-56; col. 7, lines 8-10: room

template controls room generation, parent-child relationship, child (subroom) inherits

characteristics of parent (including access capabilities))

Regarding Claim 7, Salas discloses the collaboration space of claim 6, further

comprising a display for presenting to a specific user viewing a parent room a listing of

its subrooms, the listing including for the specific user only those subrooms for which

the readers field in the forward pointer includes an entry authorizing access by the

specific user. (see Salas col. 12, lines 7-22: user interface for child (subroom) display)

Regarding Claim 8, Salas discloses an access control system for controlling user

access to forms and documents a collaboration space organized in a hierarchical

structure of parent rooms and child rooms containing the forms and documents,

comprising:

a) an access control list for specifying users who can are members of the

collaboration space; (see Salas col. 14, lines 31-36: only specific users can

access room based on access permissions)

b) for users authorized to access the collaboration space, the access control list

further specifying access levels and roles determining the specific actions the

users are authorized to perform, the roles including reader, author, and manager;

(see Salas col. 14, lines 37-44: access control level determines user's role)

c) a form selectively including a form access list; (see Salas col. 13, lines 27-34:

objects (forms) contain access control (readers) field)

d) a room in the collaboration space including at least one document created from

the form; (see Salas col. 3, lines 49-51; col. 13, lines 46-51: document

information linked to rooms)

f) the form access list identifying a subset of users who are members of the

collaboration space who are authorized to read documents created from the

form; (see Salas col. 14, lines 46-50: access permissions specify users that can read objects (documents))

g) each the forward pointer to a document including indicia identifying the document indicia specifying the address location of the document and a readers field for providing access control list control on the forward pointer including a document access field selectively including for each user authorized to access the document indicia specifying whether the authorized user can read or modify the document; users identified in any the form access list for the form from which the document was created being included in the readers field; (see Salas col. 13, lines 32-34; col. 14, lines 44-54: object (i.e. readers) access field, capability to read and/or modify linked documents)

h) entries in the readers field specifying whether a link to a child place is enabled in its parent place and granting authorization to an individual user equal to or less than the authorization for the individual user in the access control list; (see Salas col. 13, lines 32-34: objects (rooms) indicate a field (readers field) with access control parameters)

i) entries in the authors field selectively granting authorization to a user authorized as an author in the access control list to edit a document which the author creates. (see Salas col. 14, lines 46-50: access permissions specify users that can edit objects (documents))

e) Salas discloses a hierarchical structure for rooms linked by pointers. Salas does not specifically disclose a forward pointer. However, Maurille discloses a forward

pointer linking the form to the document and a reverse pointer linking the

document, back to the form; (see Maurille col. 16, lines 17-22: to/from

(forward/backward) pointers)

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Salas to operate a collaborative workspace for message

communications between members as taught by Maurille, and to modify Salas to enable

utilizing standard object oriented techniques such as access control lists (ACLs)

controlling access to objects for collaborative space management as taught by Cutler.

One of ordinary skill in the art would be motivated to employ Maurille in order to

optimize message processing and display capabilities for a networked collaborative

communications environment (see Maurille col. 6, lines 13-16), and to employ Cutler in

order to efficiently enhance security by providing limited visibility of computer resources

and protecting data integrity (see Cutler col. 1, lines 47-53).

Regarding Claim 9, 13, Salas discloses a method for controlling access to rooms

within a collaboration place, comprising the steps of:

a) maintaining for the collaboration place an access control list identifying those

   users authorized to enter the place; (see Salas col. 3, lines 49-57: member

   information and access controls)

c) displaying a parent room to a specific user, the parent room including a list of

   children rooms for which the readers fields on the forward pointers authorize the

specific user access. (see Salas Figure 1; col. 6, lines 39-55: display interface for parent room)

b) Salas discloses a readers field for providing access control list control on the forward pointer, the readers field exclusively specifying a subset of the users authorized to enter the place. Salas does not specifically disclose forward/backward pointers or a database system for the collaborative workspace. However, Maurille discloses the forward pointers including indicia identifying a child room, indicia specifying the address location of the database forming the child room; (see Maurille col. 16, lines 17-22; col. 8, lines 33-38; pointers with to/from (forward/backward) pointers for parent/child navigation: Maurille col. 6, lines 44-57: database system for member, message information), and Cutler discloses parent/child object access control list inheritance. (see Cutler col. 2, lines 27-30; col. 22, lines 65-67; col. 5, lines 21-25: objects provide access control lists controlling access to objects, object inheritance- child has equal or less access capabilities of parent)

e) Salas discloses wherein the collaboration space comprising a hierarchy of rooms, each room being a place in collaboration space including the directory of members; and Cutler discloses wherein the directory of members, the access control list of members, and the readers field selectively providing increased, decreased, and maintained access to a child place in collaboration space, with access at any level of authority to a child place enabled only for those authorized to access a corresponding parent place, and Maurille discloses wherein whether

<u>a link to a child place will be enabled for a specific user in its corresponding</u>

<u>parent place</u>. (see Salas col. 5, lines 8-11; col. 12, lines 7-22: collaborative

workspace virtual rooms) and (see Maurille col. 16, lines 17-22; col. 8, lines 33-

38: pointers, hierarchical structure) and (see Cutler col. 2, lines 27-30; col. 22,

lines 65-67; col. 5, lines 21-25: access control lists, doubly linked lists)

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Salas to operate a collaborative workspace for message

communications between members as taught by Maurille, and to modify Salas to enable

utilizing standard object oriented techniques such as access control lists (ACLs)

controlling access to objects for collaborative space management as taught by Cutler.

One of ordinary skill in the art would be motivated to employ Maurille in order to

optimize message processing and display capabilities for a networked collaborative

communications environment (see Maurille col. 6, lines 13-16), and to employ Cutler in

order to efficiently enhance security by providing limited visibility of computer resources

and protecting data integrity (see Cutler col. 1, lines 47-53).

Regarding Claim 10, Salas discloses a method for creating a child room within a

collaboration place data base, comprising the steps of:

   a) providing for the collaboration place data base a first access control list

      identifying users authorized to access the data base; (see Salas col. 13, lines 32-

      34; col. 14, lines 31-36: access control mechanism to determine authorized user

      access)

b) providing for the child room a back pointer to a parent room; (see Salas col. 6, lines 39-55: backward pointer to parent) and

c) Salas discloses a readers field indicating authorized access to a room for providing a second access control list specific to the forward pointer and providing at the parent room for the child room a forward pointer from the parent room to the child room. (see Salas col. 13, lines 32-34; col. 14, lines 37-39: object access control) Salas does not specifically disclose a database system for collaborative space. However, Maurille discloses the pointer including indicia identifying the child room, indicia specifying the address location of the database forming the child room. (see Maurille col. 6, lines 44-57: database system for member, message information)

d) initially including in the readers access field for a child room created from a form users identified in a form access list identifying users authorized to read rooms created from the form; (see Salas col. 13, lines 32-34; col. 14, lines 37-39: object access control (i.e. readers field) mechanism for controlling access to objects)

e) limiting reader access in the readers access field to the child room for a specific user to no more than the access granted the specific user in the first access control list (see Salas col. 13, lines 32-34; col. 14, lines 37-39: object access control (i.e. readers field) mechanism for controlling access to objects), and

f) Salas discloses wherein the collaboration space comprising a hierarchy of rooms, each room being a place in collaboration space including the directory of members; and Cutler discloses wherein the directory of members, the access

control list of members, and the readers field selectively providing increased,

decreased, and maintained access to a child place in collaboration space, with

access at any level of authority to a child place enabled only for those authorized

to access a corresponding parent place, and Maurille discloses wherein whether

a link to a child place will be enabled for a specific user in its corresponding

parent place. (see Salas col. 5, lines 8-11; col. 12, lines 7-22: collaborative

workspace virtual rooms) and (see Maurille col. 16, lines 17-22; col. 8, lines 33-

38: pointers, hierarchical structure) and (see Cutler col. 2, lines 27-30; col. 22,

lines 65-67; col. 5, lines 21-25: access control lists, doubly linked lists)

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Salas to operate a collaborative workspace for message

communications between members as taught by Maurille, and to modify Salas to enable

utilizing standard object oriented techniques such as access control lists (ACLs)

controlling access to objects for collaborative space management as taught by Cutler.

One of ordinary skill in the art would be motivated to employ Maurille in order to

optimize message processing and display capabilities for a networked collaborative

communications environment (see Maurille col. 6, lines 13-16), and to employ Cutler in

order to efficiently enhance security by providing limited visibility of computer resources

and protecting data integrity (see Cutler col. 1, lines 47-53).

Regarding Claim 15, Salas discloses a computer program product for controlling

access to rooms within a collaboration place However, Cutler disclose a computer

program product comprising:

 a) a computer readable medium; (see Salas col. 6, lines 57-63: software (i.e.

  instructions) to implement collaborative management system)

 b) a first program instructions for maintaining for the collaboration a first access

  control list identifying those users authorized to enter the place; (see Salas col. 3,

  lines 49-57; col. 6, lines 57-63: member information and access controls,

  instructions)

 c) second program instructions for providing in a child room second access control

  list identifying a subset of those user authorized to enter the place who are also

  authorized to enter the child parent room with manager, author, or user access;

  (see Salas col. 13, lines 32-34; col. 14, lines 44-54; col. 6, lines 57-63: access

  levels for objects (i.e. rooms), instructions)

 e) fourth program instructions for displaying a parent room to a specific user, the

  parent room including on the forward pointers a list of children rooms for which

  the readers fields authorize the specific user access; and wherein the first,

  second, third, and fourth program instructions are recorded on the computer

  readable medium. (see Salas Figure 1; col. 6, lines 39-55; col. 6, lines 57-63:

  display interface for parent room, instructions)

 d) Salas disclose an access control (readers) field with pointers linking rooms and

  providing a third access control list on the forward pointer, the third access

  control list providing access to the child room for those members who are

included in the second access control list who are also authorized to access the

child room. (see Salas col. 13, lines 32-34: object (i.e. room, pointer) access

control mechanism)   Salas does not specifically disclose forward and reverse

(i.e. double-linked) pointers. However, Maurille discloses providing forward and

reverse pointers linking the parent room with a child room in a double-linked list.

(see Maurille col. 16, lines 17-22; col. 8, lines 33-38; pointers with to/from (i.e.

forward/backward) pointers for parent/child navigation; col. 6, lines 44-57:

database system for member, message information), and Cutler specifically

discloses the usage of object oriented technology such as access control list

techniques for collaborative space management (see Cutler col. 2, lines 27-30;

col. 22, lines 65-67; col. 5, lines 21-25: objects provide access control lists

controlling access to objects, object inheritance- child has equal or less access

capabilities of parent).

e) Salas discloses wherein a <u>fifth program instructions establishing the collaboration</u>

<u>space comprising a hierarchy of rooms, each room being a place in collaboration</u>

<u>space including the directory of members;</u> and Cutler discloses wherein <u>the</u>

<u>directory of members, the access control list of members, and the readers field</u>

<u>selectively providing increased, decreased, and maintained access to a child</u>

<u>place in collaboration space, with access at any level of authority to a child place</u>

<u>enabled only for those authorized to access a corresponding parent place, and</u>

Maurille discloses wherein <u>whether a link to a child place will be enabled for a</u>

<u>specific user in its corresponding parent place.</u> (see Salas col. 5, lines 8-11; col.

12, lines 7-22: collaborative workspace virtual rooms) and (see Maurille col. 16,

lines 17-22; col. 8, lines 33-38: pointers, hierarchical structure) and (see Cutler

col. 2, lines 27-30; col. 22, lines 65-67; col. 5, lines 21-25: access control lists,

doubly linked lists)

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Salas to operate a collaborative workspace for message

communications between members as taught by Maurille, and to modify Salas to enable

utilizing standard object oriented techniques such as access control lists (ACLs)

controlling access to objects for collaborative space management as taught by Cutler.

One of ordinary skill in the art would be motivated to employ Maurille in order to

optimize message processing and display capabilities for a networked collaborative

communications environment (see Maurille col. 6, lines 13-16), and to employ Cutler in

order to efficiently enhance security by providing limited visibility of computer resources

and protecting data integrity (see Cutler col. 1, lines 47-53).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kyung H. Shin whose telephone number is (571) 272-

3920. The examiner can normally be reached on 7:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

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March 4, 2006

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PRIMARY EXAMINT